

Northeast Brazil: Wind Powers Growth and Offers Business Opportunities.

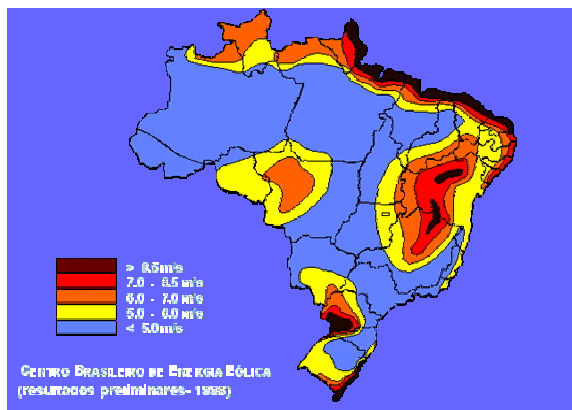
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Wind energy is a booming sector in Brazil, and the northeast region presents the highest rate of unexplored potential in the country. Recent studies have confirmed Brazil has tremendous capacity to develop its wind power potential in contrast to its current use (which only amounts to around 0.23% of total energy consumed). In addition, due to advances in technology, wind can generate electricity at competitive costs and under cleaner conditions than thermoelectric, hydroelectric, and nuclear power plants.

Given the Government of Brazil's focus on diversifying the national energy matrix, the wind power sector now presents significant opportunities for American firms. The map shows that the Northeastern Region of Brazil, especially between Rio Grande do Norte and Ceará, presents the highest wind power potential in the country. According to former Maranhao Governor Jose Reinaldo Tavares, the states of Maranhao and Piau also offer high wind power potential that has not yet been properly measured.



According to the Ministry of Mines and Energy, the north east of Brazil has the potential to generate 75,000 out of a possible 143,000 MW— which would mark a 30% increase in national electricity generation; however, if environmental reserves and urban areas (where wind turbines cannot be installed) are excluded, the number falls to 30,000 megawatts, which is still equivalent to 200% of the energy produced at Itaipu (the world's second largest hydroelectric power generation plant). Some international companies have already realized Brazil's potential for wind energy generation. In 2008, Econergy established its first wind farm in the state of Ceara with 32 wind turbines. The farm can

provide energy for 90,000 homes or an urban population of 200,000 people. The company plans to complete fourteen more farms this year. When all fourteen wind farms are operational, Ceara will produce 500 megawatts of wind power energy, and will have the largest wind powered electrical generation capacity in Brazil.

Another promising state is Rio Grande do Norte. It already has a contract for 200 MW of which 49.3 MW will come from the Rio do Fogo wind farm (owned by the Spain's Iberdrola group) and 151 MW is due to be installed in 2009 at the Guamare wind farm project by Brazil's NEO group.

Although globally wind energy grows 26% and is considered a clean alternative energy source, it has only recently gained importance in Brazil due to Proinfa, the federal government's investment program that has been in effect since 2004. To attract international investors, Proinfa established a fixed price for the wind energy produced by private companies, who build and operate the wind farms. By keeping prices relatively stable, the GoB reasoned that investors could focus on production and profits. Their strategy is working. Brazil currently has 20 wind power plants under construction and another 28 pending construction. The Brazilian government envisions wind power

playing a greater role in Brazil's future energy matrix. To that end, the Brazilian Mines and Energy Ministry is planning a wind power auction for the second semester of 2009.

On the regulatory front, a new Brazilian power regulator's (ANEEL) resolution, in effect since January 2008, allows consumers with a power demand of 500KW or higher to buy power from renewable sources in the non-regulated market. Incentives for these consumers include 50% discount in the power distribution tariff. This measure may expand the demand for renewable power plants, including wind power.



The future looks promising for more companies to enter the market to meet Brazil's energy needs. Rio Grande do Norte's Industry Federation President, Mr. Flavio Azevedo sees great prospects for U.S. suppliers of wind power related services, wind turbines, blades, wind tower structures, engines, shafts, rotors, electric materials and other related products. One thing is for sure, there will be no wind shortages.

For more information on export opportunities at the wind power supply chain and other energy related topics, please visit our webpage:

<https://www2.focusbrazil.org.br/siteUSA/index.aspx?link=industry/energy/index.html>, and contact:

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